

CLAIMS

1. A cementing composition for an oil well or the like, comprising an hydraulic binder, dense particles with a density higher than the density of the hydraulic binder, and reinforcing particles with a density of less than 1.5 g/cm^3 , preferably less than 1.2 g/cm^3 constituted by a rubber or a flexible material, of low compressibility and with an average grain size of less than $600 \text{ }\mu\text{m}$.
2. A cementing composition according to claim 1, characterized in that the dense particles are haematite particles.
3. A cementing composition according to any preceding claim, characterized in that the Young's modulus of the material constituting the reinforcing particles is less than 5000 MPa , preferably less than 3000 MPa , more preferably less than 2000 MPa .
4. A cementing composition according to any preceding claim, characterized in that the Poisson ratio of the material constituting the reinforcing particles is more than 0.3 .
5. A cementing composition according to any preceding claim, characterized in that the average size of the reinforcing particles is in the range $80 \text{ }\mu\text{m}$ to $600 \text{ }\mu\text{m}$, preferably in the range $100 \text{ }\mu\text{m}$ to $500 \text{ }\mu\text{m}$.
6. A cementing composition according to any preceding claim, characterized in that the reinforcing particles are formed from a flexible material selected from polyamide, polypropylene, polyethylene, styrene butadiene and styrene divinylbenzene.

7. A cementing composition according to any preceding claim, characterized in that the slurry comprises, by volume, 2% to 15% of dense particles, 5% to 20% of flexible particles, 20% to 45% of cement and 40% to 50% of mixing water.
8. A cementing composition according to any preceding claim, characterized in that it further comprises one or more additives of the suspension agent, dispersing agent, anti-foaming agent, retarder, setting accelerator, fluid loss control agent, gas migration control agent or expansion agent type.
9. Application of cementing compositions according to any one of claims 1 to 6 to cementing zones which are subjected to extreme dynamic stresses, such as perforation zones and the junctions of branches of a multilateral well.
10. Application of cementing compositions according to any one of claims 1 to 6 to the constitution of cement plugs.

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